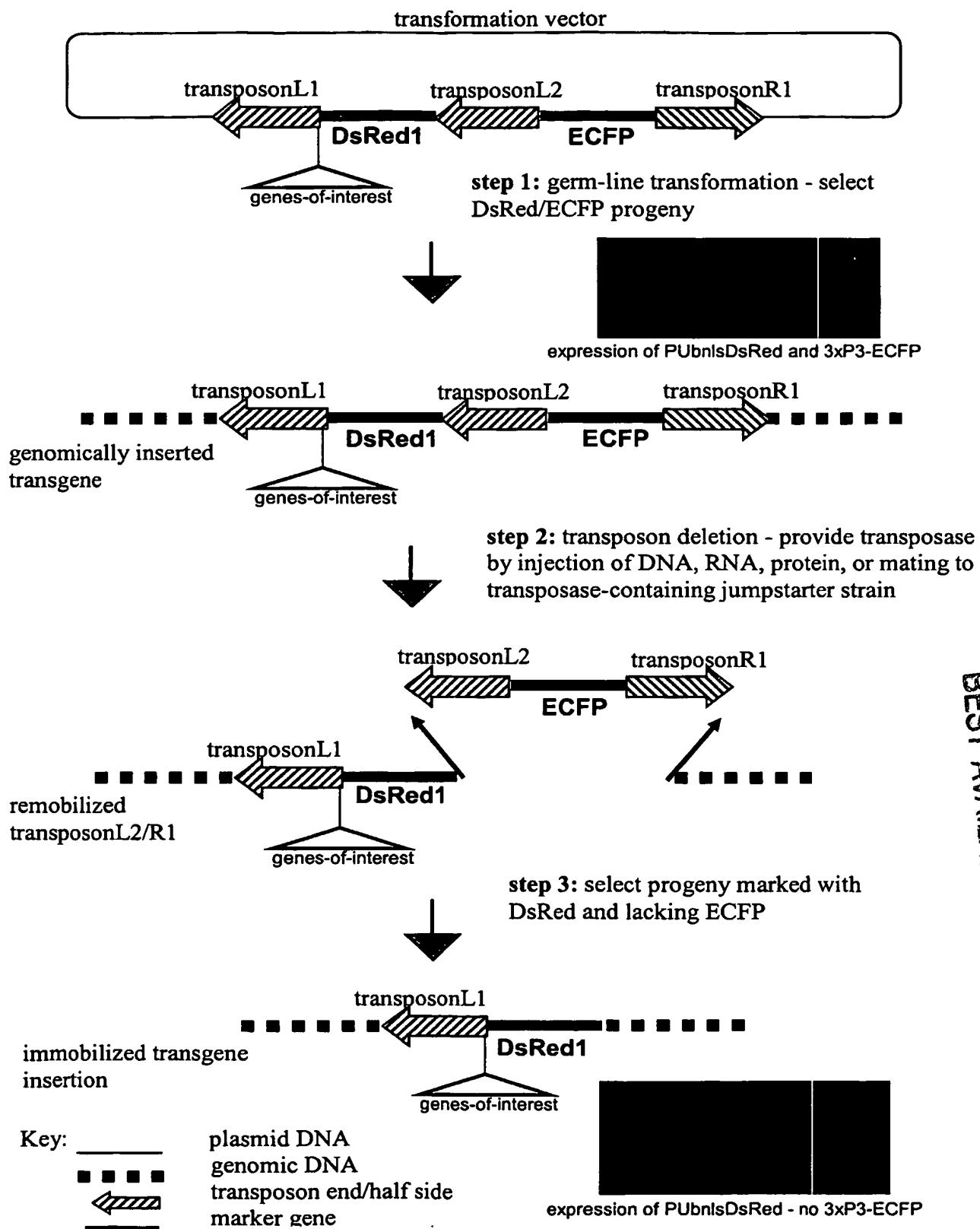


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Figure 1: Protocol for integration and re-mobilization for stabilized vector creation.



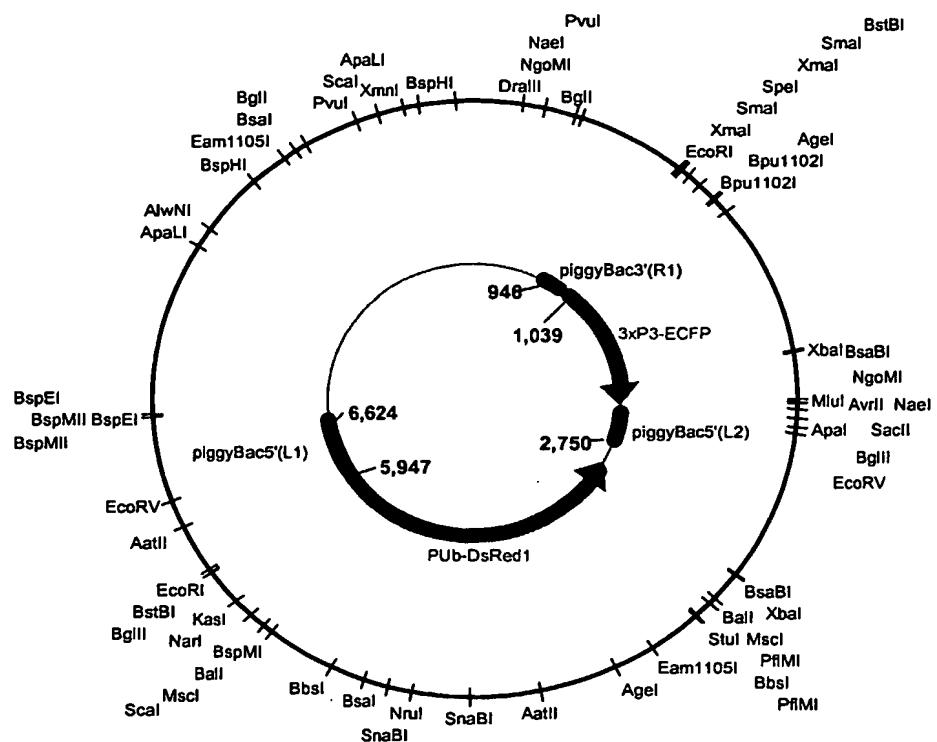


Fig. 2. Diagram of stabilization vector pBac{L1-PUbDsRed1-L2-3xP3-ECFP-R1}

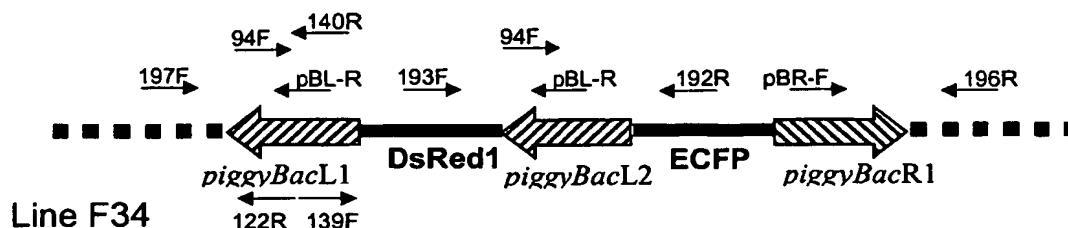
Plasmid size: 9.1 kb

Unique *Kasi* cloning site

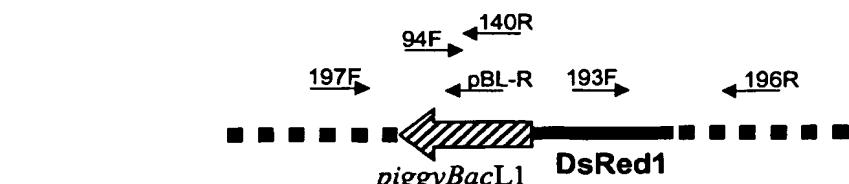
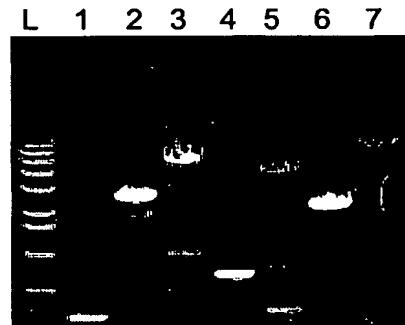
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Figure 3: PCR analysis and verification of pBac{L1-PUbDsRed1-L2-3xP3-ECFP-R1} vector integration in line F34 and L2-3xP3-ECFP-R1 remobilization in line F34-1M

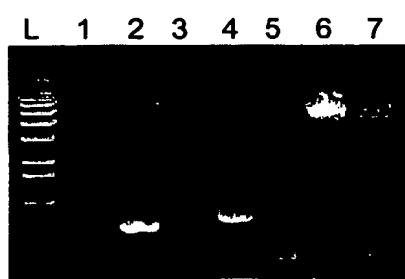
PCR Primers	94F pB1-20	5'- CCCTAGAAAGATAGTCTGCG-3'
	122R pB159	5'- ATCAGTGACACTTACCGCATTGACA -3'
	139F pB445	5'- CCAGAGCGATAACAGAAGAACG -3'
	140R pB668	5'- TGTTCACTGCAGAGACTCGG-3'
	pBL-R	5'- TATGAGTTAAACTTAAAAGTCACG -3'
	pBR-F	5'- GTTGAATTATTATTAGTATGTAAGTG -3'
	192R ECFP	5'- AGAAGAACGGCATCAAGGC -3'
	193F DsRed	5'- ACTCCAAGCTGGACATCACC -3'
	196R DmX-3	5'- CGCAGACGAAGAACAAACAGTA -3'
	197F DmX-3'	5'- GCTGTTGCTTGTGTTGTCAT -3'



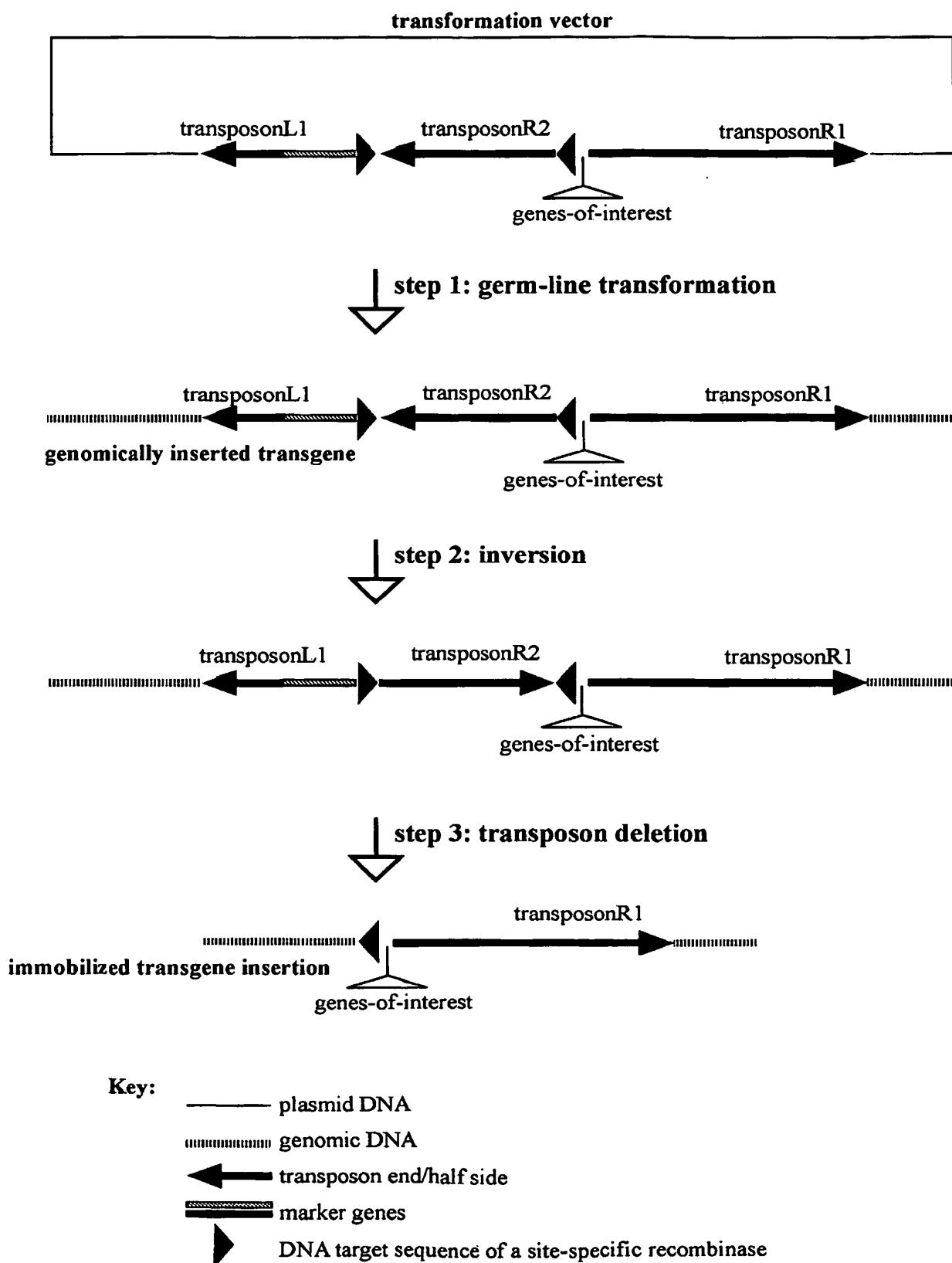
Primer pairs	Predicted (bp)	Obtained (kbp)
1- pBR/196	237	0.2
2- 193/196	2,630	2.6
3- 192/197	4,897	4.9
4- 140/197	713	0.7
5- pBL/197	278 + 4,063	0.3 + 4.0
6- 94/196	2,084 + 5,958	2.0
7- 196/197	6,003	6.0



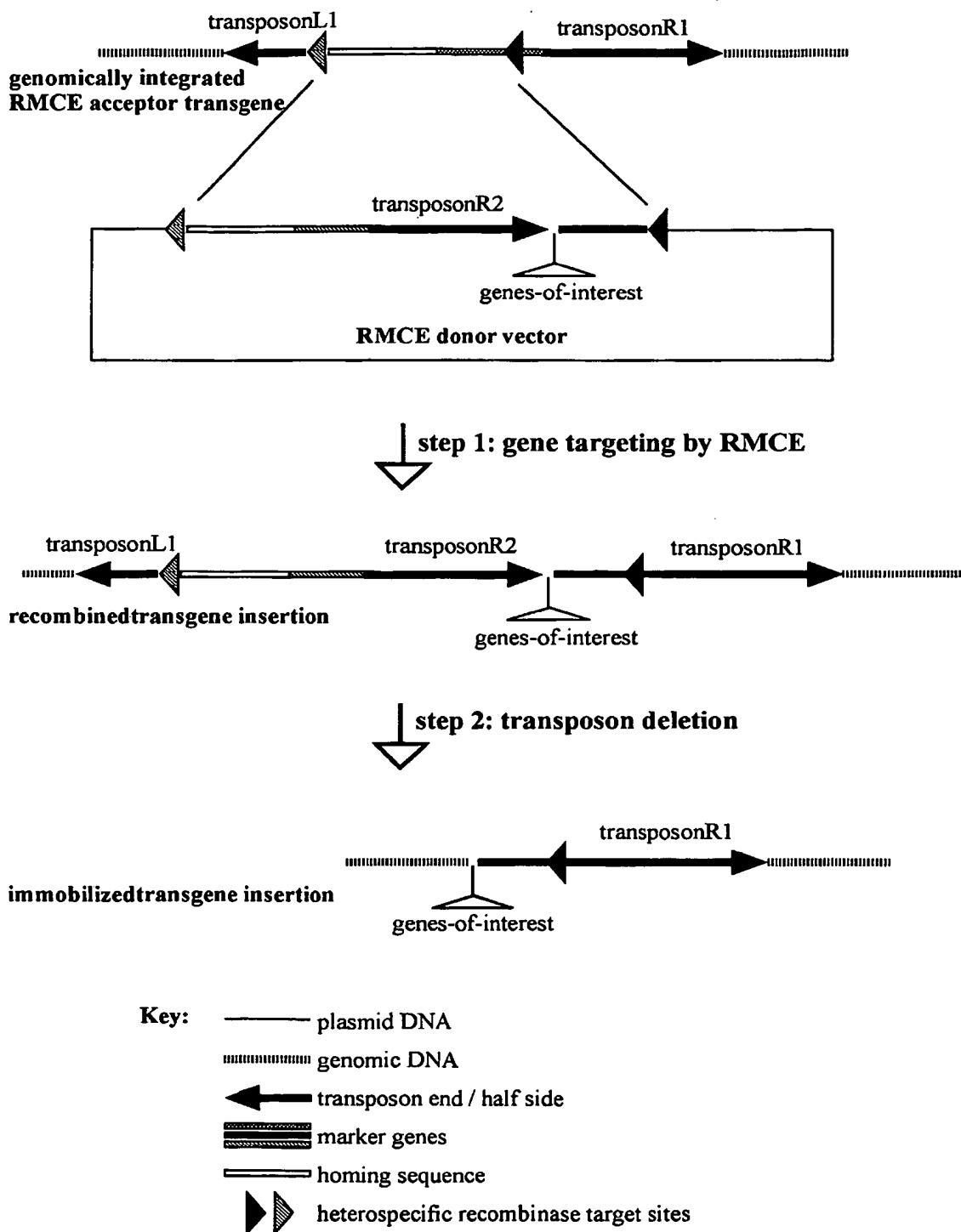
Primer pairs	Predicted (bp)	Obtained (kbp)
1- pBR/196	-	-
2- 193/196	624	0.6
3- 192/197	-	-
4- 140/197	713	0.7
5- pBL/197	278	0.3
6- 94/196	3,952	4.0
7- 196/197	3,997	4.0



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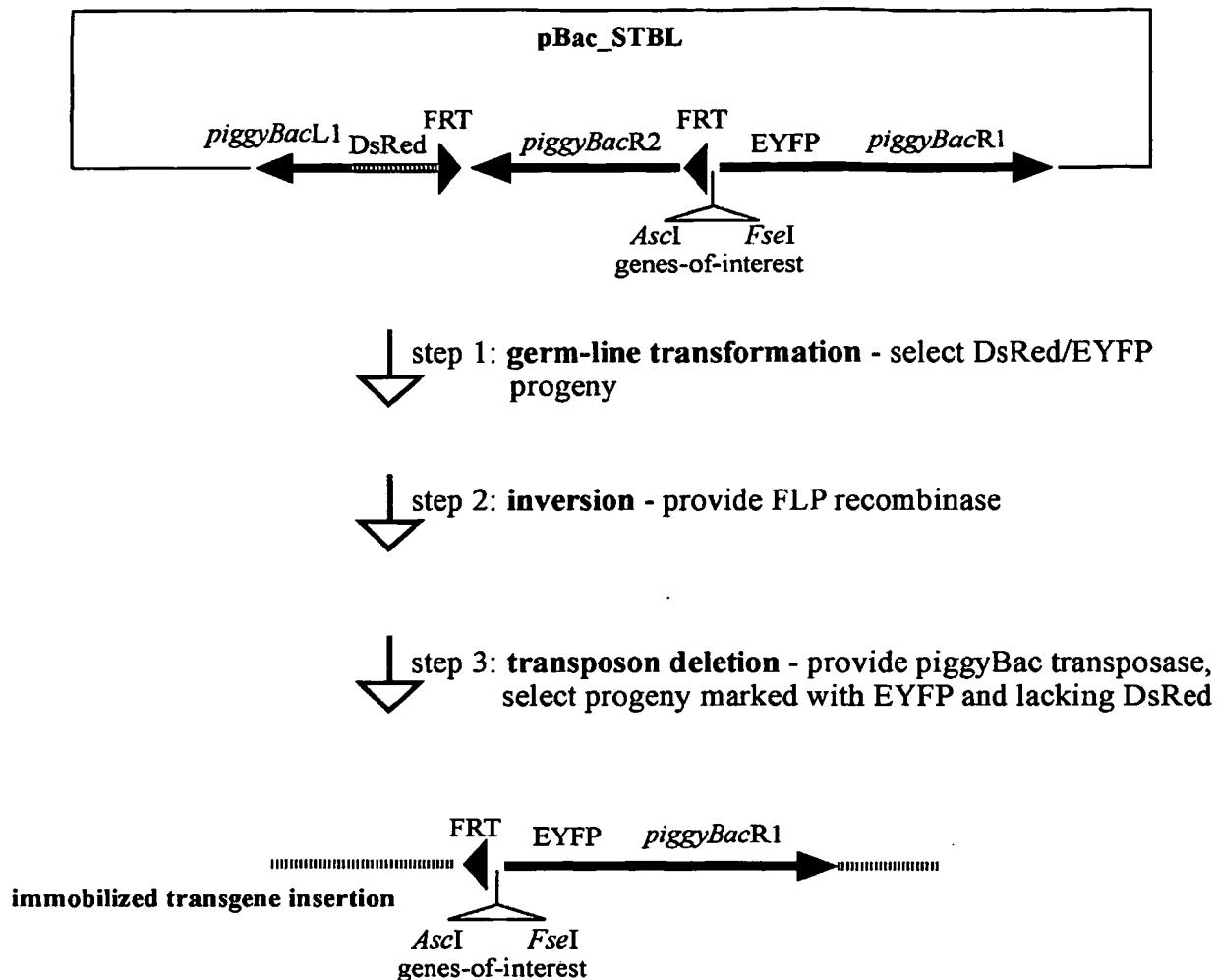
Figure 4: Conditional excision competent transformation vectors

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Figure 5: RMCE with subsequent transposon deletion

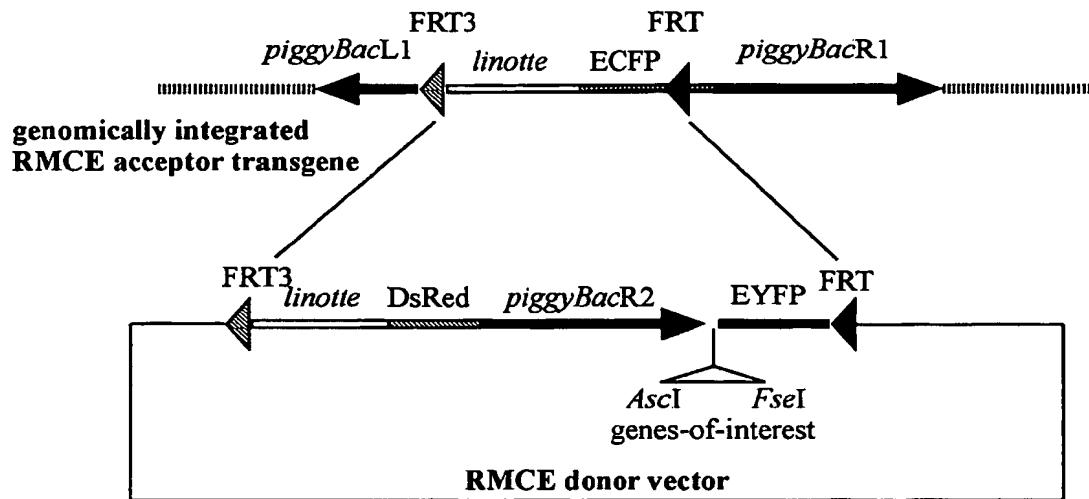
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**Fig 6: Embodiment: Stabilized vector creation with pBac_STBL
(principle shown in Fig. 4)**

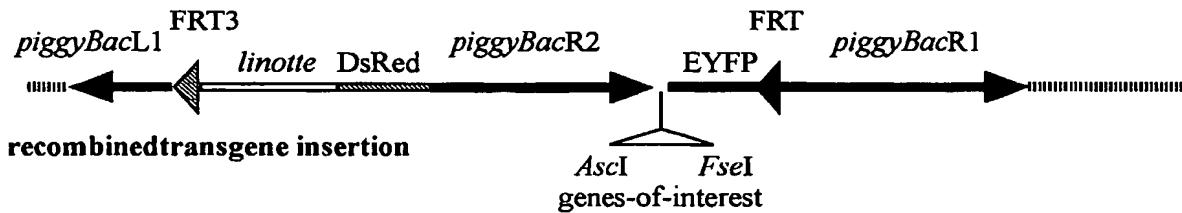


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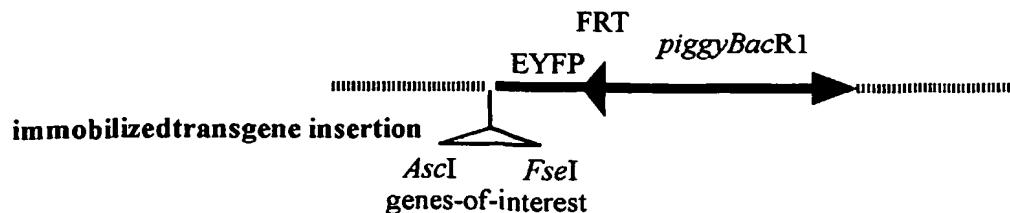
**Fig 7: Embodiment: Stabilized vector creation by RMCE
(principle shown in Fig. 5)**



↓ step 1: gene targeting / RMCE - provide *Flp* recombinase,
select progeny with EYFP and DsRed



↓ step 2: transposon deletion - provide piggyBac transposase,
select progeny with EYFP and lacking DsRed



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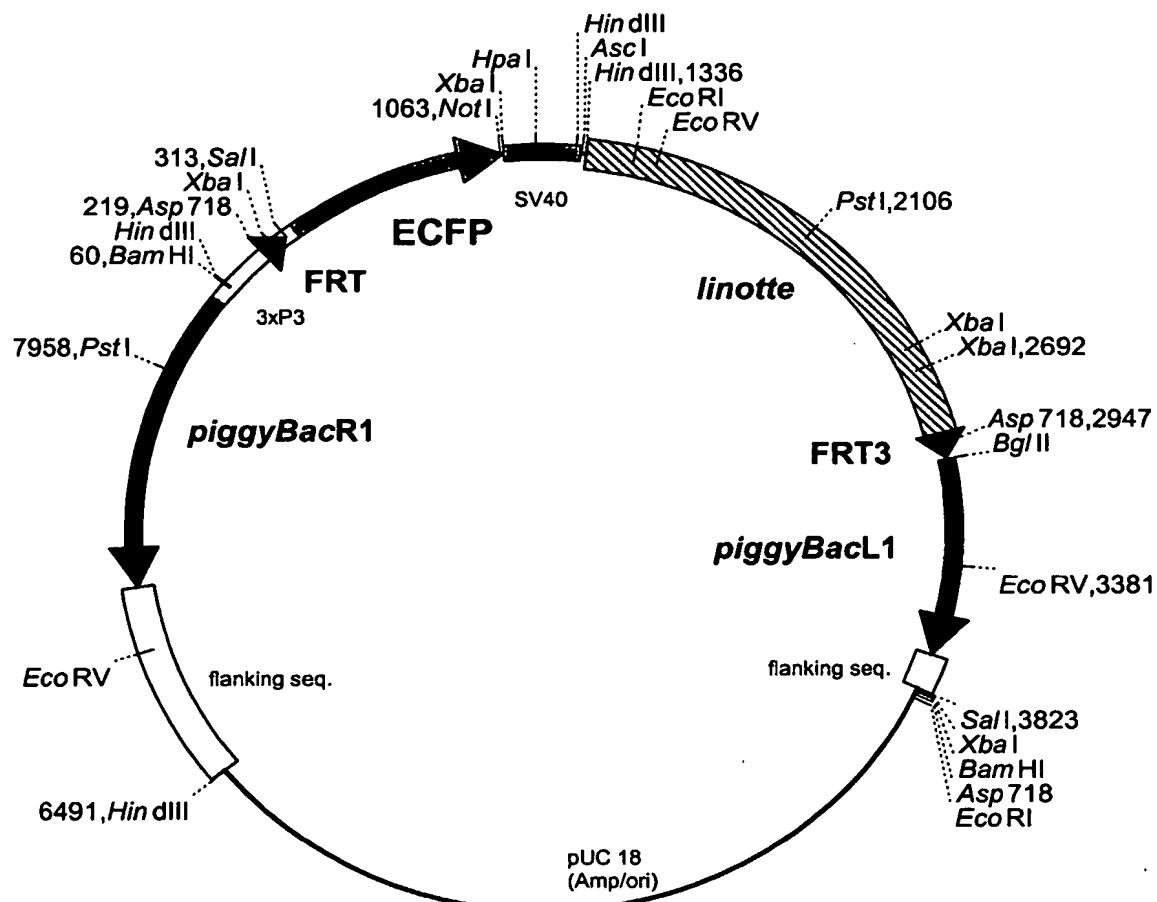


Figure.8: Diagram of RMCE acceptor vector

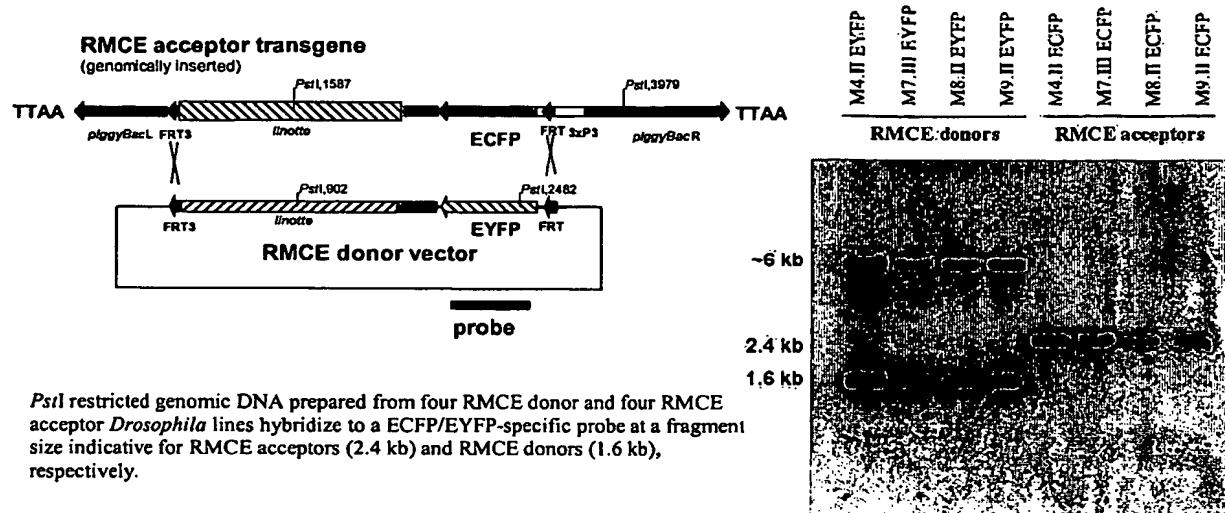
pBac{3xP3-FRT-ECFP-linotte-FRT3}

Plasmid size: 8.2 kb

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Fig. 9: Molecular analysis of RMCE acceptor and RMCE donor transgenic lines and PCR analysis of transgene mobilization

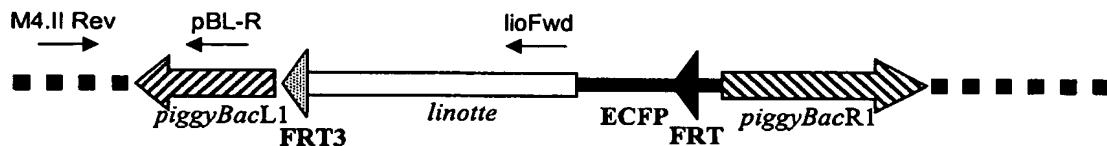
a) Genomic integration of RMCE acceptor and RMCE donor can be discriminated by Southern Analysis



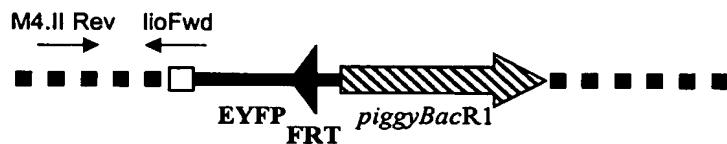
b) Transgene immobilization (as shown in Fig. 7) can be verified by PCR analysis

PCR Primers	pBL-R	5' - TATGAGTTAACCTTAAAGTCACG - 3'
	M4.II Rev	5' - GGGCCACACGATTATGGC - 3'
	IioFwd	5' - GTTTATTTTGGCAACATGAG - 3'

genomically integrated RMCE acceptor (line M4.II ECFP):



immobilized transgene insertion (lines i#7, i#8):



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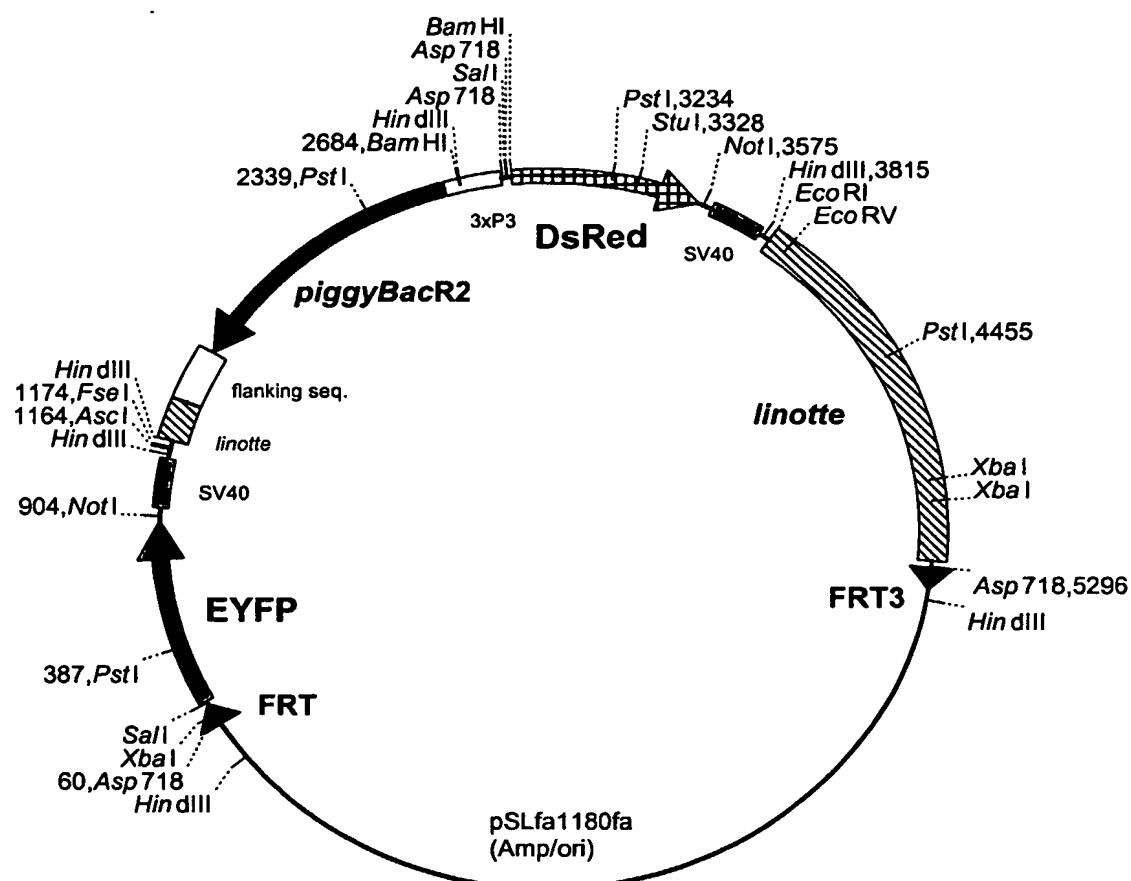


Figure 10: Diagram of final RMCE donor vector for transgene stabilization

pSL-FRT-EYFP-pBacR2-3xP3-DsRed-linotte-FRT3

Plasmid size: 8.6 kb

Unique cloning sites: *AscI*, *FseI*

Fig. 11 Approximate DNA sequence for the vector shown in Fig. 1.

CTAAATTGTAAGCGTTAATATTTGTTAAATTCGCGTTAAATTTGTT
AAATCAGCTCATTAAACCAATAGGCCAATCGCAAATCCCTTAT
AAATCAAAAGAATAGACCGAGATAGGGTTGAGTGTGTTCCAGTTGGAA
CAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAA
CCGTCTATCAGGGCGATGGCCACTACGTGAACCATACCCCTAATCAAGT
TTTTGGGGTCGAGGTGCCGTAAAGCACTAAATCGAACCCCTAAAGGGAG
CCCCCGATTAGAGCTTGACGGGGAAAGCCGGCGAACGTGGCGAGAAAGG
AAGGGAAAGAACGAAAGGAGCGGGCGTAGGGCGCTGGCAAGTGTAGCG
GTCACGCTGCGTAACCACACCCGCCGGCTTAATGCCCGCTACA
GGCGCGTCCCATTGCCATTCAAGCTGCCAATGTGGAAAGGGCGAT
CGGTGCGGGCTCTCGTATTACGCCAGCTGGCGAACGGGGATGTGCT
GCAAGGCAGTTAAGTTGGTAACGCCAGGGTTTCCAGTCACGACGTTG
TAAAACGACGGCCAGTGAACGCCCTCGTTCACTCACGTTTGAACCCG
TGGAGGACGGCAGACTCGCGGTGCAAATGTGTTACAGCGTGTGGAG
CAGATGAAGATGCTGACACGCTGCAGAACACGCACTAGATTAACCTA
GAAAGATAATCATATTGTGACGTACGTTAAAGATAATCATGCGTAAAATT
GACGCATGTGTTTATCGGTCTGTATATCGAGGTTATTTATTAATTG
ATAGATATTAAGTTTATTATTTACACTACATAACTAATAATAATTG
AACAAACAATTATTATTTATGTTATTATTTATTAACAAACAAACT
CAAATTTCTCTATAAAAGTAACAAACTTTATCGAATTCTGCAGGCC
GGGGGATCCACTAGTTCTAGTGTCCACATGGTTAATCGAGCTCGCC
CGGGGATCTAATTCAATTAGAGACTAATTCAATTAGAGCTAATTCAATT
GGATCCAAGCTTATCGATTTCGAAACCTCGACCGCCGGAGTATAATAGA
GGCGCTTCGCTACGGAGCGACAATTCAATTCAAACAAGCAAAGTGAACA
CGTCGCTAACGCAAAGCTAACGAAATAACAGCGCAGCTGAACAGCTA
AACAAATCGGGTACCGCTAGAGTCGACGGTACGATCCACCGGTGCCACC
ATGGTGAGCAAGGGCGAGGAGCTGTTCACCGGGTGGTGCCTATCTGGT
CGAGCTGGACGGCGACGTTAACCGCCACAAGTTACGCGTGTCCGGCGAGG
GCGAGGGCGATGCCACTACGGCAAGCTGACCCCTGAAGTTCATCTGACC
ACCGCAAGCTGCCGTGCCCTGCCACCCCTCGTGACCCCTGACCTG
GGCGTGCAGTGTCTCAGCGCTACCCGACCACATGAAGCAGCACGACT
TCTCAAGTCCGCCATGCCGAAGGCTACGTCACCGAGGCGCACCCTTC
TTCAAGGACGACGGCAACTACAAGACCCCGGCCGAGGTGAAGTTGAGGG
CGACACCCCTGGTGAACCGCATCGAGCTGAAGGGCATCGACTTCAAGGAGG
ACGGCAACATCCTGGGCACAAGCTGGAGTACAACATCAGCCACAAC
GTCTATATCACCGCGACAAGCAGAAGAACGGCATCAAGGCCACTTCAA
GATCCGCCACAACATCGAGGACGGCAGCGTGCAGCTGCCGACCACTACC
AGCAGAACACCCCCATCGCGACGGCCCGCTGCTGCTGCCGACAACCC
TACCTGAGCACCCAGTCGCCCTGAGCAAAGACCCCAACGAGAACGCGA
TCACATGGTCTGCTGGAGTTCGTGACCGCCGCCGGATCACTCTCGGCA
TGGACGAGCTGTACAAGTAAAGCGGCCGACTCTAGATCATAATCAGCC
ATACCACTTGTAGAGGTTTACTTGCTTAAAAACCTCCCACACCTC
CCCCTGAACCTGAAACATAAAATGAATGCAATTGTTGTTAACTGTT
TATTGCAAGCTTATAATGGTTACAAATAAGCAATAGCATCACAAATTCA
CAAATAAGCATTTTCACTGCATTCTAGTTGTTGTTGTCACAAACTC
ATCAATGTATCTTAAAGCTTATCGATACGCGTACGGCGCCTAGGCCGG
CCGATACTAGAGCGGCCGCCACCGCGGTGGAGCTCCAGCTTTGTTCCCT
TTAGTGAGGGTTAATTAGATCTTAAACGACTCACTATAGGGCAATTGG
GTACCGGGCCCCCTCGAGGTGACGGTATCGATAAGCTGATATCTAT
AACAAAGAAAATATATATAATAAGTTACGTAAGTAGAACATGAAAT
AACAAATAATTATCGTATGAGTTAAATCTTAAAGTCACGTAAAAGATA
ATCATGCGTCAATTGACTCACGCGTGTATAGTTCAAAATCAGTGA
ACTTACCGCATTGACAAGCACGCCACGGAGCTCCAAGCGGCCACTGA
GATGTCCTAAATGCACAGCGACGGATTGCGCTATTAGAAAGAGAGAGC
AATATTCAAGAATGCATGCGTCAATTACGCAACTATCTTCTAGGG
TTAATCTAGCTGCATCAGGATCATCGTCGGTCTTTCCGGCTCAG

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Fig. 11a

TCATCGCCAAGCTGGCGCTATCTGGGCATCGGGGAGGAAGAACCCGTG
 CCTTTCCCGCAGGGTGAAGCGGCATGAAAGAGTTGCCGAGGATGAC
 TGCTGCTGCATTGACGTTGAGCAAAACGCACGTTACCATGATGATTG
 GGAAGGTGTGGGATACATTGATGAGTTGACAAACACAACAGAATGC
 AGTAAAAAAATGCTTATTTGAAATTGATGCTATTGCTTATTT
 GTAACCATTATAAGCTGCAATAAACAAAGTAACAACAACAAATTGCAATTCA
 TTTTATGTTTCAGGTTCAGGGGAGGTGAGGTTTTAAAGCAAGT
 AAAACCTCTACAAATGTTGATGGCTGATTATGATCTAGAGTCGGCCCG
 CTACAGGAACAGGTGGTGGCGGCCCTCGGTGCGCTGTAACGCTCCACGA
 TGGTGTAGTCCTCGTTGAGGTTGATGTCAGCTGGAGTCCACGTAG
 TAGTAGCCGGCAGCTGCACGGCTTCTGGCCATGTTAGATGGACTTGAA
 CTCCACCAGGTAGTGGCCGCGCTTCAGCTCAGGGCCTTGTGGATCT
 CGCCCTTCAGCACGCCGTCGCGGGGTACAGGCCTCGTGGAGGCCCTCC
 CAGCCCATGGTCTTCTGCAATTACGGGCCGTCGGAGGGAAAGTCAC
 GCGATGAACCTCACCTGTTAGATGAAGCAGCCGCTCTGCAGGGAGGAGT
 CTTGGGTCACTGTCACCACGCCCGTCCTCGAAGTTCATCACCGCCTCC
 CACTTGAAGCCCTGGGAAGGACAGCTTCTGTTAGTCGGGGATGTCGGC
 GGGGTGCTTCACGTACACCTGGAGCCGTAAGGAACTGGGGGACAGGA
 TGTCCCAGGCAGGGCAGGGGCCCTGGTACCTTCAGCTTCACG
 GTGTTGTGCCCTCGTAGGGGCCCTCGCCCTCGCCCTCGATCTCGAA
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 CCTTGATGACGTTCTGGAGGAGCGCACCATGGTGGGACCGGGTGGATCC
 CCGATCTGCATTGGATTATTCTGCGGTCAAAATAGAGATGTGGAAAA
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 AACATTCTGGCTGGGAATAAAATGGAAACTTATTATGACCGCAAC
 TTGTTGAGAAACCCCTATTAAACCTCTACGAATATTGAAACAAAGGAA
 GCGAAGAAACAGGAACAAAGGTAGTTGAGAAACCTGGTGGCTCGTC
 ATCGTTTCATAATGCGAGTGTGTCATGTTATACACAGCTGAAACG
 CATGCATACACATTATTGTTGTTGACGTCACAACACTACTAAG
 CAATAAGAAATTTCAGACGTTGCTTCAGCAACACTACTCTAT
 TTCAGCTAAAATAAGTGGATTCTGTTGGAAAATACCTCAATTAAAGCAA
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 TTCTCGAATTTCAAATGGTCACTGCAATTCAACATTGCCAATAA
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 TTGATGCCAATTGATTGGAAAACAAGATGCGTGGCTGCCAATTCTTAT
 TTGTAATTACGTAGAGCGTTGAATAAAATGGCGAACAAAGAC
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 ACTAATTGGTAACAGCGAGTTAAACACTTACGTTCTGACTTTCAG
 AATGTTCTTAAATTGACTTTAATCACCAACAAATTAAAGTATAAATT
 CGCTGATTGCGCTTACTTCTGCTTGACTTGCTGCTGCAAATGTCAAT
 TGGTTTGAGGCAGCGTGCAGCTGTTATACCTTCGGTGT
 CGTTGAAATCACTAAAAAAACCGTAGTGTGCTGAAACACTTACAG
 AGAAAAAAATGTGCGGAATGTTTGATACGTACGAATACCTTGTAT
 TAAAATTTTATGATTCTGTTGATACATTGTTGTGTTTGTGTT
 TAAACTCACACAGTACAAACAAATAAAATATTAAAGACAATTCAA
 TTGAGACCTTCTCGTACTGACTTGACCGGCTGAATGAGGATTCTACCT
 AGACGACCTACTTCTACCATGACATTGAATGCAATGCCACCTTGTAT
 AAACCTACAAAAGTCCAAGGCTTGTAGGATTGGTGTATTTAGTTGC
 TTTGAAATAGCACTGCTTCTACCGCTATAATTGAAACTCGCAG
 CTTGACTGGAAATTAAAGTAATTCTGTTGAGGTTAAAGGGTGT
 AAGTGTGATGTGTTGAGCGTTGCGGCAACGACTGCTATTGATATAT
 TTCAAAACTTATTGTTTGAAAGTGTGTTAAATGGAGCTATCTGGCAAC
 GCTGCGCATAATCTACACAAAGCTTCTTAATCCATTAAAGTGAAT
 TTGTTTTACTCTTCGGCAAATAATTGTTAAATGCTTAAAGTGGCTT
 ACATCTGGATAAGTAATGAAAACCTGCATATTATAATTAAACATATA
 ATCCACTGTGCTTCCCGTGTGGCCATACCTAAAAAGTTTATT

Fig. 11b

TCGCAGAGCCCCGACGGTCACACTACGGTTGGCGATTTGATTTGG
 ACAGTACTGATTGCAAGCGCACCGAAAGCAAAATGGAGCTGGAGATTTG
 AACCGCAAGAACAGCAAGCCGTACGGCAAGGTGAAGGTGCCCTCCGGCG
 CACGCCATGGCGATCTGCGGCCCTAATTACAAGACCTGAAGCAGA
 CCCCACACCGGAATGCCAGTCGCTCGTGGAACTGAAGGGCAAAAGC
 CTGAAAGATAACGGACACATTGGAATCTCGCTCGCTGGTCCGGCGACAA
 GATCGGGTACCGTCACTGCAGAATTGAAGCTTGAAGCTCGAGATCTGAC
 AATGTTCACTGCAAGAGACTCGGCTACGCCTCGTGGACTTTGAAGTTGACC
 AACAAATGTTATTCTTACCTCTAATAGTCTCTGTGGCAAGGTCAAGAGATT
 CTGTTAGAAGCCAATGAAGAACCTGGTTCAATAAACATTGTTGTC
 TAATATTCACCTACCGTGTGACGTTGGCTGCACCTCATGTACCTCATCTA
 TAAACGCTTCTCTGTATCGCTCTGGACGTCATCTCACTTACGTGATCT
 GATATTTCACTGTCAGAACCTCACCAACAAGCTCGTCATCGCTTGCAG
 AAGAGCAGAGAGGGATATGCTCATGCTAAAGAACTACCCATTATTAT
 ATATTTAGTCACGATATCTATAACAAGAAAATATATATAATAAGTTATC
 ACGTAAGTAGAACATGAAATAACAATATAATTATCGTATGAGTTAAATCT
 TAAAAGTCACGTAAGAATAATCATGCGTCAATTGACTCACCGGGTCGT
 TATAGTTCAAAATCACTGACACTTACCGCATTGACAAGCACGCCACGG
 GAGCTCCAAGCGGCAGTGGAGATGTCCTAAATGCACAGGGACCGGATTGCG
 GCTATTAGAAAGAGAGAGCAATATTCAAGAATGCACTGCGTCAATTGTA
 CGCAGACTATCTTCTAGGGTTAAAAAAGATTGCGCTTACTCGACCTA
 AACTTTAACACGTTAACCATGCACGCCCTAACGGTGAACGTGTTGTT
 AGGCCACCTGGGATACCACTGTCGCGGCTTCCGGACACAGTTCCGG
 ATGGTCAGCCCGAACCGCATCGAACCCGAACATACCGGGACAGCCG
 GAACTGCCGTGCCGGTGTGCAAGATTAAATGACAGCGGTGCGCGCTGGGAT
 ATTACGTCAAGCGAGGACGGGTATCCTGGCTGGATGCCGAGAAATGGACA
 TGGATACCCGTGAGTTACCGGGCGCTTGGCGTAATCATGGTCA
 TAGCTGTTCTGTGAAATTGTTATCCGTCACAATTCCACACAACAT
 ACGAGCCGGAAGCATAAAAGTAAAGCCTGGGTGCTTAATGAGTGAGCT
 AACTCACATTAAATTGCGTTCGCTCACTGCCGCTTCCAGTCGGGAAAC
 CTGTCGTGCCAGCTGCAATTAGAATCGGAAACGCCAGCGGGAGAGCGG
 TTTGCGTATTGGCGCTTCCGCTTCCGTCACTGACTCGCTGCGCT
 CGGTGCGTTCGGCTGCCGAGGGTATCAGCTCACTAAAGCGGTAAATA
 CGGTTATCCACAGAACGGGATAACGAGGAAAGAACATGTGAGCAAA
 AGGCCAGAAAAGGCCAGGAACCGTAAAAGGCCGCTTGCTGGCTTT
 TCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATGACGCTCAAGT
 CAGAGGTGGCGAAACCCGACAGGACTATAAGATACCAAGCGCTTCCCC
 TGGAGCTCCCTCGCGCTCTCTGGGAAGCGTGGCGCTTCTCATAGCTCA
 CGCTGTAGGTATCTCAGTTGGTAGGTGCTCGCTCAAGCTGGCTG
 TGTGCAAGAACCCCCGGTTCAGCCCGACCGCTGCGCTTATCCGGTAAC
 ATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATGCCACTGGCAGCA
 GCCACTGGTAACAGGATTAGCAGAGCGAGGTATGAGGCGGTGCTACAGA
 GTCTTGAGTGGCTTAACACTACGGCTACACTAGAAGGACAGTATTG
 GTATCTGCGCTCTGCTGAAGCCAGTTACCTCGGAAAAGAGTTGGTAGC
 TCTTGATCCGGCAAACAAAACCCACCGCTGGTAGCGGTGTTTTGTTG
 CAAGCAGCAGATTACCGCAGAAAAAGGATCTCAAGAAGATCCTTGA
 TCTTTCTACGGGCTGACGCTCAGTGGAACGAAAACACGTTAAGGG
 ATTTGGTCATGAGATTATCAAAAGGATCTTCACCTAGATCCTTTAAA
 TAAAAAATGAAGTTAAATCAATCTAAAGTATATGAGTAAACCTGGT
 CTGACAGTTACCAATGTTAACAGTGGAGGCACCTATCTCAGCGATCTGT
 CTATTCGTTCATCCATAGTTGCTGACTCCCCGTCGTGAGATAACTAC
 GATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGCAG
 ACCCACGCTACCGGCTCCAGATTATCAGCAATAAACAGCCAGCCGAG
 AGGGCCGAGCGCAGAAGTGGCTGCAACTTTATCCGCTCCATCCAGTC
 TATTAATTGTTGCCGGAAAGCTAGAGTAAGTAGTTGCGCAGTTAATAGTT
 TGCGCAACGTTGCTGCACTACAGGCATCGGGTGTACGCTCGTGT
 TTTGGTATGGCTTACCTAGCTCCGGTTCCCAACGATCAAGCGAGTTAC

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Fig. 11c

ATGATCCCCATGTTGTGCAAAAAAGCGGTTAGCTCCTCGGTCCGA
TCGTTGTCAAGTAAGTGGCGCAGTGTATCACTCATGGTTATGGCA
GCACTGCATAATTCTTACTGTCATGCCATCCGTAAAGATGCTTTCTGT
GACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGAC
CGAGTTGCTCTTGCCCGCGTCAATACGGGATAATACCGCGCACATAGC
AGAACTTTAAAAGTGCTCATCATTGGAAAACGTTCTCGGGCGAAAAGT
CTCAAGGATCTTACCGCTGTTGAGATCCAGTCGATGTAACCCACTCGTG
CACCCAACTGATCTCAGCATCTTACTTTCACCAAGCGTTCTGGGTGA
GCAAAAACAGGAAGGCAAAATGCCGCAAAAAAGGGATAAGGGCGACACG
GAAATGTTGAATACTCATACTCTCCTTTCAATATTATTGAAGCATT
ATCAGGGTTATTGTCTCATGAGCGGATAACATATTGAATGTATTAGAAA
AATAAACAAATAGGGGTTCCCGGCACATTCCCCGAAAAGTGCCAC

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Fig. 12 Approximate DNA sequence for the vector shown in Fig. 8
 pBac{3xP3-FRT-ECFP-linotte-FRT3}

1
 GAGCTGCCGGGGATCTAATTCAATTAGAGACTAATTCAATTAGAGCTAATTCAATTAGGATCCAAGCTTAT
 CGATTTCGAACCCCTCGACGCCGGAGTATAAATAGAGCGCTTCGTCTACGGAGCGACAATTCAATTCAAACA
 AGCAAAGTGAACACCGTCTAAGCGAAAGCTAAGCAAATAAAACAAGCCAGCTGAACAAGCTAAACAATCGGG
 GTACCCGGGGATCTTGAAGTCTCTATTCCGAAGTCTCTATTCTCTAGAAAAGTATAAGGAACCTCAGAGCGCTTT
 TGAAGCTAGGCGGGCCCTAGAGTCGACGGTACGATCCACCGGTGCCACCATGGTACGCAAGGGCGAGGAGCTG
 TTCACCGGGGTGGTGCCTACCTGGTACGCTGGACGGCGACGTAACCGCCACAAGGTTCAAGCTCAGCGTGTCCGGCG
 AGGGCGAGGGCGATGCCACCTACGGCAAGCTGACCTGAAGTCTCATCTGACCCACCGGCAAGCTGCCGTGCC
 CTGGCCACCCCTCGTACCGACCTGGGGCGTCCAGTCTCAGCCGCTACCCGACCCACATGAAGCAG
 CACGACTTCTCAAGTCGCCATGCCGAAGGCTACGTCAGGAGCGCACCCTCTTCAAGGACGACGGCA
 ACTACAAGACCCCGCGCCGAGGTGAAGTCTGAGGGCGACACCCCTGGTACACCGCATTGAGCTGAAGGGCATCGA
 CTTCAAGGAGGACGGCAACATCCTGGGCACAAGCTGGAGTACAACATCAGCCACAACGTCTATATCACC
 GCCGACAAGCAGAAGAACGGCATCAAGGCAACTCAAGATCCGACCAACATCGAGGACGGCAGCGTGCAGC
 TCGCCGACCACCTACAGCAGAACACCCCCATCGGGCGACGGGCCGTGCTGCTGCCGACAACCAACTACCTGAG
 CACCCAGTCCGCCCTGAGCAAGACCCCAACGAGAACGGCGATCACATGGTCTGCTGGAGTTCTGACCGCC
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 GCAATTGTTGTTAACTTGTCTATTGCACTTATAATGGTTACAAATAAGCAATAGCATCACAAATTCA
 CAAATAAGCATTTTTCACTGCATTCTAGTTGGTTGTCCAACACTCATCAATGTATCTAAAGCTTATC
 GATACCGTACGGCGCCAAAAGCTCTGTCTCTCTGTAAATAACTAACGATTATAAAGTATAAAAT
 GTCGAATGTTATTGGCAACATGAGTTAATTGAAATTGAATCAAACACAATAAAAAAGTTAAAAG
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 ATGAATGTTGTTAGTTAAATAAAGGATATCGAACAGTATGCCAGTTGGTATTAGCAATTGGAG
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 GGAAATTAAATCGTTTAGCGAGTCCAAACGGAAAATAGAAAATCGGAGAGTAGCCGAACTGCAGTTAAA
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 TGCTGCCCTAATCGTAAGTAACTGTTGATTTCGCTGCCTTTGGCTTTCAATTAACTGGCAATT
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 GGCAAAACGAATGCGACTTGCTGGATTATTACTCTTTGCGTAAATAATATGCCCTTTAATTGTTCTA
 GCCTCGGAGCTACATATAAAGTAGTATTGCTCCTCTCAATTGCCAGCTCAGGCCATCTCAATATT
 CTATTGCTAGCATGATTCTCTGTTGATTAAATTGTCGTTAGACTTATCTAGATAAATAGAAATGC
 TAAAGCGATTAAATTGTTATTCTTGCCTAAATTGAAATTGCAAGTGGATTCTCATCTAGATAAG
 TAATCCCTCTATAATCAAAGTTTATTAAAAAAATCATATTGTTCTAGTTATCCAATTAAACAAATAC
 AAAACAAATTGAGATATTTATAACGCTCTCAAAGAAAATAAAGTAAATCATGTTAGTACAAAAATG
 ACACCAAAATGAGTATTAAATTTAGTTAGTTAGTTATATTATTAGCCTAAACTATTCCATA
 GAAGAATACTACTCTAATAAGCTGGGTACCCGGGATCTGAAAGTCTCTATTCCGAAGTCTCTATTCTCA
 AATAGTATAGGAACCTCAGATCTGACAATGTTCACTGAGAGACTCGGCTACGCTCGTGGACTTGAAGTTG
 ACCAACAAATGTTATTCTACCTCTAAATAGTCTCTGTGGCAAGGTCAAGATTGTTAGAAGCCAATGAAGA
 ACCTGGTGTCAATAACATTGTCGCTAAATTCACTACCGCTTGACGTTGGCTGCACCTCATGTAC
 TCATCTATAACGCTCTCTGCTATCGCTCTGGACGTCTTCACTACGTGATCTGATATTCACTGTCAG
 AATCCTCACCAACAAGCTCGTCATCGCTTGCGAGAAGAGCAGAGAGGATATGCTCATCGTCAAAGAACTACC
 CATTATTATATTAGTCAGATATCTATAACAGAAAATATATATAATAAGTTATCACGTAAGTAGAA
 CATGAAATAACAATAATTATCGTATGAGTTAAATCTTAAAGTCACGTTAAAGATAATCATGCGTATT
 GACTCACCGCGGTGTTATTAGTCTAAACATCAGTGCACACTTACCGCATTGACAAGCACGCCACGGGAGCTCCA
 AGCGGGACTGAGATGCTCTAAATGCACAGCGACGGATTGCGCTATTAGAAAAGAGAGAGCAATATTCAAG
 AATGCATGCGTCAATTACGAGACTATCTTCTAGGGTTAAAAAGATTGCGCTTACTCGACCTAAACT
 TTAAACACGTCAAGAATCTCGTTGACAAAAACACATTGCGCAAGCTGTGACGCGACGCGCGCTAA
 AGAATGGCAAACCAAGTCGCGAGCGTCACTTAGAGGATCCCCGGGTACCGAGCTCGAATTGTAATCAT
 GGTCACTAGCTGTTCTGTGAAATTGTTATCCGCTCACAATTCCACACATACGAGCCGGAAAGCATAAA
 GTGTAAGCCTGGGGTGCCTAATGAGTGCAGTCAACTCACATTAAATTGCGTTGCGCTACTGCCGCTTCCAG
 TCGGGAAACCTGCGTGCAGCTGCATTAATGAATCGGCAACCGCGCGGGAGAGGCGGTTGCGTATTGGC

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Fig. 12 a

GCTCTCCGCTTCCTCGCTACTGACTCGCTGCCCGTCGGCTGCCGAGCGGTATCAGCTCACTC
 AAAGGCGGTAATACGGTTATCCACAGAACGAGGAAACATGTGAGCAAAAGGCCAGCAA
 AAGGCCAGGAACCGTAAAAGGCCGCGTGTGCTGCCGTTTCATAGGCTCCGCCCTGACGAGCATCACA
 AAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAAGCGTTCGGCTTCCCTGGAAAG
 CTCCCTCGTGCCTCTCTGCTTCCGACCCCTGCCGCTTACCGGATACCTGTCCGCTTCTCCCTCGGAAAGC
 GTGGCGCTTCTCAATGCTCACGCTAGGTATCTCAGTTGGTAGGTCTGCTCCAGCTGGCTGTG
 TGCACGAACCCCGTTCAGCCGACCGCTGCCCTATCGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACA
 GAGTTCTGAAGTGGTGGCTAACTACGGCTACACTAGAAGGACAGTATTGGTATCTGCCTCTGCTGAAGC
 CAGTTACCTCGGAAAAGAGTTGGTAGCTTGTACCGGAAACAAACCACCGCTGGTAGCGGTGGTTTT
 TGTTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTAAGAAGATCCTTGATCTTCTACGGGTCT
 GACGCTCAGTGGAAACGAAAACCTCACGTTAACGGATTGGTACATGAGATTACAAAAGGATCTCACCTAGA
 TCCCTTAAATTAAGTTAAATCAATCTAAAGTATATGAGTAAACTGGTCTGACAGTTACCA
 ATGCTTAAATCAGTGAGGCACCTATCTCAGCAGTGTCTATTGTTGTCATCCATAGTTGCCGACTCCCCGTC
 GTGAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCGAGTGTGCAATGATACCGCGAGACCCACGCT
 CACCGGCTCCAGATTATCAGCAATAAACAGCAGCCGGAAAGGGCCAGCGCAGAAGTGGCTCTGCAACTTT
 ATCCGCTCCATCCAGTCTATTAAATTGTTGCCGGAAAGCTAGAGTAAGTAGTCCGAGTTAATAGTTGCGC
 AACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTCTGGTAGGCTTCAATTAGCTCCGGTT
 CCCAACGATCAAGCGAGTTACATGATCCCCATGTTGCAAAAAGCGGTTAGCTCCTCGGTCTCCGAT
 CGTTGTCAGAAGTAAGTGGCCGAGTGTATCACTCATGGTTATGGCAGCACTGCATAATTCTTACTGTC
 ATGCCATCCGTAAGATGCTTTCTGTGACTGGTAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCCG
 GACCGAGTTGCTCTTGCCCGCGTCAATACGGGATAATACCGGCCACATAGCAGAACTTTAAAGTGTCTCAT
 CATTGGAAAACGTCTCGGGCGAAAACCTCAAGGATCTTACCGCTGTTGAGATCCAGTCATGTAACCC
 ACTCGTGCACCCAACTGATCTCAGCATCTTACTTACCGCTTCTGGGTGAGCAAAAACAGGAAGGC
 AAAATGCCGAAAAAAAGGAATAAGGGCAGACGGAAATGTTGAATACTCATACTCTCCTTTCAATTAA
 TTGAAGCATTATCAGGGTTATTGTCATGAGCGGATACATATTGAATGTATTAGAAAATAAAATA
 GGGGTTCCGCGCACATTCCCGAAAAGGCCACCTGACGCTCAAGAAACCATTATTATCATGACATTAAACCT
 ATAAAAAATAGCGTATCACGAGGCCCTTCGTCTCGCGTTCTGGTGTAGACGGTGAACACATCTGACACAT
 GCAGCTCCCGGAGACGGTACAGCTTGTCTGTAAGCGGATGCCGGAGCAGACAAGCCGTCAGGGCGCGTCA
 GCGGGTGTGGCGGGTGTGGCTTAACATATGCGGCATCAGAGCAGATTGTAAGTGAGAGTGCACCCATA
 TGGCTGTTGAAATACGCACAGATGCGTAAGGAGAAAATACCGCATCAGGCCATTGCCATTAGGCTGCG
 CAACTGTTGGGAAGGGCGATCGGTGCCCTTCGCTATTACGCCAGCTGGCAAAGGGGATGTGCTGCA
 AGGCAGTTAAGTTGGTAACGCCAGGGTTTCCAGTCACGACGTTGAAAACGACGGCCAGTGCACAGCTT
 GTTTAAATATAACAAAATTGTAACGTTGAGGTTAAATCAAAATCAAAATAATTAAATAGTGTCCGTA
 ACTTGTGGCTTCACCTTTGAGGAACACGTTGGACGCCAAATCCGTAACATAACACAAGTTGATTTAAT
 AATTAGCCAACACGTCGGCTGCGTGTGTTTGCGACCGCTGTGTAACGTTGATTAACGGTCTGATT
 AACTGTTGAAATAATTAAATTGTTGGTCTTCTTAAATCTGTGATGAAATTGTTAAATAACTTTAAATT
 CTTCATTGGTAAAAATGCCACGTTGCAACTTGTGAGGGTCTAATATGAGGTCAAACCTAGTAGGAGTTT
 ATCCAAAAAAGAAAACATGATTACGCTGTACACGAAACGCGTATTAACGAGGTGCAAAGTATAAGAGGGTT
 AAAAATATATTACGACCATATACGCATCGGGTTGATATCGTTAATATGGATCAATTGAAACAGTTGATT
 AACGTGCTCTGCTCAAGCTTGTACAAACGCAAATCGACGAAAATGTCGGACAATATCAAGTCGATGA
 GCGAAAACCTAAAAGGCTAGAATACGACAATCTCACAGACAGCGTTGAGATACGGTATTACGACACGAG
 GCTGAATAATAAAAATTAGAAAATTTAACCTAGAAAAGATAATCATATTGTCAGTAAAGTAAAGA
 TAATCATGCGTAAATTGACGCATGTTTATCGGTCTGTATATCGAGGTTTATTATTAAATTGAATAGAT
 ATTAAGTTTATTATTTACACTTACACTAAATAATAAAATTCAACAAACAAATTATTTATGTTTATTATT
 TATTAAAAAAACAAAACCTCAAAATTCTCTATAAAAGTAACAAAACCTTTAAACATTCTCTTTTACAA
 AAATAAACTTATTGTACTTTAAAAACAGTCATGTTGATTATAAAATAAGTAATTAGCTTAACCTACAT
 AATAGAAACAAATTATACTTATTAGTCAGTCAGAAACAAACTTGGCACATATCAATATTGTCCTGACAAA
 TAACTTTTGCACTTTGCACTGATGATTGCCCTTCGCCATTATTTAGAGGGCAGTAAGTACAGTAAGT
 ACGTTTTCTTCACTGGCTCTCAGTACTGTCATCTGATGTACCGAGGACTTCATTGGCAAATATTAGAG
 ATATTATCGCGCAAATATCTCTCAAAGTAGGAGCTCTAAACGCTTACGCATAACGATGACGTCAGGCTCA
 TGTAAGGTTCTCATAAATTGCGACTTGGACCTTGTCTCCCTGCTACTGACATTATGGCTGTATAT
 AATAAAAGAATTATGCAGGCAATGTTATCATTCCGTACAATAATGCCATAGGCCACCTATTGTCCTCCTA
 CTGCAGGTCTACAGAACACATTGGCTAGCGTGTCCACTCCGCTTGTAGTTGATTATAACATAACCA
 TTTGCGGTTACCGGTACTTCGTTGATAGAAGCATCCTCATCACAGATGATAATAAGTATACCATCTAGC
 TGGCTCGGTTATATGAGACGAGAGTAAGGGGTCGTCAAAACAAAACATCGATGTTCCCACGGCCTGGAG
 CGACTGTTTCAGTACTTCCGGTATCTCGCTTGTGATCGCACGGTCCCACATGGTTAATT

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Fig. 13 Approximate DNA sequence for the vector shown in Fig. 10
 pSL-FRT-EYFP-pBacR-3xP3-DsRed-linotte-FRT3

CGTCGCTAACGCAAAGCTAACGAAATAAACAAAGCGCAGCTAACAGCTAACAAATCGGGTACCGGGGATCTT
 GAAGTCTATTCCGAAGTCTCTATTCTCTAGAAAGTATAGGAACCTCAGAGCGCTTTGAAGCTAGGCGGCCCT
 AGAGTCGACGGTACGATCCACCGGTCGCCACCATGGTAGCAAGGGCGAGGGAGCTGTCACCGGGTGGTGCCA
 TCCTGGTCAGCTGGACGGCAGTAAACGGCACAAGTTCAGCGTGTCCGGCAGGGCGAGGGCGATGCCACCT
 ACGGCAAGCTGACCCCTGAAGTTCATCTGCACCAACGGCAAGCTGCCGTGCCCTGGCCCACCCCTCGTACCC
 TCGGCTACGGCCTGCACTGCTCGCCGCTACCCCGACCACATGAAGCAGCACGACTTCAAGTCCGCCATGC
 CCGAAGGCTACGTCCAGGAGCGCACCATCTCTCAAGGACGACGGCAACTACAAGACCCCGCAGGTGAAGT
 TCGAGGGCGACACCTGGTGAACCGCATCGAGCTGAAGGGCATCGACTTCAAGGAGGACGGCAACATCCTGGGC
 ACAAGCTGGAGTACAACACTACAACAGCCACAACGTCTATATCATGGCGACAAGCAGAAGAACGGCATCAAGGTGA
 ACTTCAAGATCCGCCACAACATCGAGGACGGCAGCGTGCAGCTCGCCGACCACTACCAGCAGAACACCCCATCG
 GCGACGGCCCGTGTGCTGCCCACAACCAACTACCTGAGTACCGTACCGCCCTGAGCAAAGACCCCAACGAGA
 AGCGCGATCACATGGTCTGCTGGAGTTCGTGACCGCCGGGATCACTCTGGCATGGACGAGCTGTACAAGT
 AAAGCGGCCGCACTCTAGATCATAACTCAGCCATACCAACATTGTAGAGGTTTACTTGCTTTAAAAACCTCCC
 ACACCTCCCCCTGAACCTGAAACATAAAATGAATGCAATTGTTGTTAACTTGTTATTGAGCTTATAATGG
 TTACAAATAAGCAATAGCATCACAAATTTCACAATAAAAGCATTTTTACTGCAATTCTAGTTGTTGTTGTC
 CAAACTCATCAATGTATCAAGCTTATCGATACCGTACGGCGCCCTAGGCCGGCGATCTCGCGCCAAAAGC
 TTCTGTCTCTTTCTGTAATAAAACTAACGATTATAAAAGTATAAAATGTCGTATGTTTATTGGCAACATG
 AGTTTAATTGAAATTGAAATCAAACACAATAAAAAAAAGTAAAGGTTAAATCATTATATTACATCATTAAATT
 CGAATTATGTTAATATGGATCAATTGAAACAGTTGATTAACGTGTCTGCTCAAGTCTTGATCAAACCGCAA
 ATCGACGAAATGTGTCGGACAATATCAAGTCGATGAGCGAAAACACTAAAGGCTAGAATACGACAATCTCACA
 GACAGCGTTGAGATATACGGTATTACGACAGCAGGCTGAATAAAAAAAATTAGAAACATTATTAAACCTTA
 GAAAGATAATCATATTGACGTACGTTAAAGATAATCATCGTAAATTGACGATGTGTTTATCGGTCTGTA
 TATCGAGGTTTATTATTAAATTGAAATAGATATTAAAGTTTATTATATTACACTACATAATAAAATT
 AACAAACAATTATTATTTATGTTATTATTAAACAAAACACTCAAATTCTTCTATAAAAGTAACAA
 AACTTTAAACATTCTCTTTACAAAATAAACTTATTGACTTTAAACAGTCATGTTGATTATAAAA
 TAAGTAATTAGCTTAACCTATACATAATAGAAACAAATTATACTTATTAGTCAGTCAGAAACAAACTTGGCACAT
 ATCAATATTATGCTCTGACAAATAACTTTTGCAATTGTCAGTCAGTCATTGCTTCTCGCCCTTATTTAGA
 GGGCAGTAAGTACAGTAAGTACGTTTTCATTACTGGCTCTTCAGTACTGTCACTGTGATGACCGGACTTC
 ATTGGCAAATATTAGAGATATTACGCGAAATATCTCTTCAAGTAGGAGCTTCTAACGCTACGCATAAA
 CGATGACGTCAGGCTCATGTAAGGTTCTATAAATTGCACTTTGGACCTTCTCCCTGCTACTGAC
 ATTATGGCTGTATATAATAAAAGAATTATGCAAGGCAATGTTTATCATTGGTACAATAATGCCATAGGCCACCT
 ATTGCTCTCTACTGCAGGTACACAGAACACATTGGTCTAGCGTCCACTCCGCTTGTGATTATA
 ATACATAACCATTGCGGTTACCGGTAACCTCGTTGATAGAACGATCCTCATCACAAGATGATAATAAGTATAC
 CATCTTAGCTGGCTCCGTTATATGAGACGAGAGTAAGGGTCCGTCAAACAAACATCGATGTTCCCACTGG
 CCTGGAGCGACTGTTTCAGTACTCCGGTATCTCGGTTGATCGCACGGTCCCACAATGGTAATTG
 AGCTCGCCGGGGATCTAATTCAATTAGAGACTAATTCAATTAGAGCTAATTCAATTAGGATCCAAGCTTATCGA
 TTGCAACCTCGACGCCGGAGTATAAATAGAGCGCTCGTCTACGGAGCGACAATTCAAACAAAGCAA
 AGTGAACACGTCGTAAGCGAAAGCTAACGAAATAAAACAGCGAGCTAACAGCTAACAAATCGGGTACCGC
 TAGAGTCGACGGTACCCGGGGGATCCACCGGTCGCCACCATGGTGCCTCTCCAAGAACGTCATCAAGG
 AGTTCATGCGCTTCAAGGTGCGATGGAGGGCACCGTGAACGGCACAGAGTCAGATCGAGGGGAGGGCGAGG
 GCCGCCCTACGAGGGCACACACCGTGAAGCTGAAGGTGACCAAGGGGCCCTGCCCCCTGCCCTCGCCTGGGACA
 TCCTGCCCCCAGTTCCAGTACGGCTCCAAGGTGACGTGAAGCACCCGGGACATCCCCGACTACAAGAACG
 TGTCCTTCCCGAGGGCTCAAGTGGAGCGGTGATGAACCTCGAGGACGGCGGGTGGTGAACCGTGACCCAGG
 ACTCCTCCCTGAGGACGGCTGCTCATCTACAAGGTGAAGTTCATCGGCTGAACCTCCCTCCGACGCCCG
 TAATGCGAGAAGAACCATGGCTGGAGGCTCCACCGAGGCCGTACCCCCCGGACGGCGTGTGAAGGGCG
 AGATCCACAAGGCCCTGAAGCTGAAGGACGGGCCACTACCTGGTGGAGTCAAGTCATCTACATGGCCAAGA
 AGCCCGTGCAGCTGCCGGCTACTACTACGTTGACTCCAAGCTGGACATCACCTCCCACAACGAGGACTACACCA
 TCGTGGAGCAGTACGAGCGCACGGGCCACCCACTGTTCTGTAGCGGCCGACTCTAGATCATATAATCA
 GCCATACCACATTGTAAGAGGTTTACTTGCTTTAAAAACCTCCACACCTCCCCCTGAACCTGAAACATAAAA
 TGAATGCAATTGTTGTTAACTGTTATTGCACTTATAATGGTACAAATAAAAGCAATAGCATCACAAATT
 TCACAAATAAAAGCATTGTTACTGCAATTCTAGTTGTTGTCACAAACTCATCAATGTATCAAGCTTATCGA
 TACCGTACGGCGGAATTCAATTGGAGGTTGTTGTTGACCTTAAACTTATATGAATGTTGTTAGTT
 AATTAATAAAAGGATATCGAACAGTATGCCAGTTGGTATTAGCAATTGGAGATGTTGATGAGATGTTGCA
 ACTGCAACCAGGAGTTGAGGTTCCAACACGACTGTTAACGGGTTCCAGCCTCAAGTTCTACAGAACAGTCAC
 GAGGCCACACACAGTCACAGTCACACTCCACTCCGCTGGCGTGGAGGCCATTGCTTGTGGCGAAGTGT
 TGTTTATCCAGTTGACAGTTGAGGAAATCGTACGGTACGGTACGGGATCAAACGCGGAAACGAACCGGACGAAC
 GCGGAGAAAAGCGAGGAAAACGGGTGAGAGACAGAGACTGATTGGAAATATGTGCGCCTGAGTTTCCCGGC
 CAGAAGGCAAAGTGCCAATGCTCTGACAAATAATTCTGTAATAATCAGCCGATTGAAATCAACGCGACGCTC

Fig. 13a

GTAAAATTGCAAATGCAGCGAAAAAGTGAACAGCAGTCAGCGGAAATTAAATCGTTTAGCGAGTGCCAAGC
 GGAAATAGAAAATCGGCAGAGTAGCGAACCTGCAGTAAAACATCTCTCCTCTTATTGCAGCTAAACAAACCGG
 CGGATTAATCGAATCGAAGAGATGGCCCCAACTTGTAAACAATCGGATTACTTTGACCCGTAGCCAGCGGT
 CAGGCCCATCTCAATATTTCCTCAACTTGACAGGGTGTGCCCTAATCGTAAGTAATCGTGTGATTTCG
 CCTGCCTTTGGCTTTCAATTAACTGGCAATTATTGCCACTTGTGTGCGTTCGACTTTAAATCAAAT
 TTGATTATGCCAAGCCGGATTGGCTCTGGCAAACGAATGCGACTGTGTGGATTATTACTCTTTGC
 GTAAATAATATGCCCTTAATTGTTCTAGCCTCGGAGCTACATATAAAGTAGTATTGCTCCCTTCATTG
 GCCAGCTACCGAGAAACAAGAAAACATTCTATTGTCTAGCATGATTCTGTTTGATTAAATTGTTCTG
 TAGACTTATCTAGATAAAATAGAAATGCTAAAGCAGTTAAATTGTATTCTTGCCTAAATTAAATTCGATTG
 GCAAGTGGATTCATCTAGATAAGTAATCCCTCTATAATCAAAGTTTATTAAATTCGATTATTTTCATA
 GTTATCCAATTAAACAATACAAAACATTAGATATAATTAAACGTCCTCAAAAGAAAATAATAGTA
 AAATCATGTAGTCAAAAAAATGACACCAAAATGAGTATTAAATATTAGTTAGTTAGTTAGTTATATTATT
 AGCCTAATCTATTTCATAGAAGAAACTACTCTAATAAGCTGGGGTACCCGGGATCTTGAAGTTCCTATTCC
 GAAGTTCCTATTCTCAAATAGTATAGGAACCTCAGATCCGACCCGGGACATGTACAGAGCTCGAGAAGTACTAG
 TG GCCACGTGGCGTGCACCTTAAGCTGGCACTGGCGCTGTTACACGTCGTGACTGGAAAACCGTGG
 GTTACCCAACCTTAATGCCCTTGACGACATCCCCCTTCGCCAGCTGGCGTAATAGCGAAGAGGCCGACCGAT
 CGCCCTTCCAACAGTGTGCAGCTGAATGGCGAATGGCGCTGATGCCGTATTCTCCTTACGCATCTGTGC
 GGTATTTCACACCGCATACGTAAAGCAACCATAGTACGCCCTGTAGCGGCCATTAAGCGCGGGGTG
 TGTTACGCCAGCGTACCGCTACACTGCCAGGCCCTAGGCCCGCTCCCTCGCTTCTCCCTTC
 TCGCCACGTTGCCGCTTCCCGTCAAGCTAAATCGGGGCTCCCTTAGGGTCCGATTAGTGTCTTAC
 GGCACCTCGACCCCAAAAAACTTGATTGGGTATGGTCACTGAGTGTGGCCATGCCCTGATAGACGGTTTTC
 GCCCTTGACGTTGGAGTCCACGTTAAATAGTGGACTTGTCCAAACTGGAACACACTAACCTATCT
 CGGGCTATTCTTTGATTATAAGGGATTGCGATTGCCATTGGTTAAAAATGAGTGTATTAAACAAA
 AATTAAACCGGAATTAAACAAATATTACGTTACAATTATGGTGCACTCTCAGTACAATCTGCTCTGATG
 CCGCATAGTTAAGCCAGCCCCGACACCCGCAACACCCGCTGACGCCCTGACGGCTGTGCTCCCGCAT
 CCGCTTACAGACAAGCTGTGACCGTCTCCGGAGCTGCATGTGTCAGAGGTTTACCGCATACCGAACCG
 CGAGACGAAAGGGCCTGTGATACGCCATTGGTTAATGTCATGATAATAATGGTTCTAGACGTCAG
 GTGGCACTTTGGGAAATGTGCCGGAACCCCTATTGTTATTCTAAATACATTCAAATATGTATCCGC
 TCATGAGACAATAACCTGATAAAATGCTTCAATAATATTGAAAAGGAAGAGTATGAGTATTCAACATTCCGT
 TCGCCCTTATTCCCTTTTGCGCATTGCTTCTGTGTTGCTCACCCAGAACGCTGGTAAAGTAAAAG
 ATGCTGAAGATCAGTGGTGCACGAGTGGTACATCGAAGTGGCTACAGCGGTAAGATCCTGAGAGTT
 TTCGCCCGAAGAACGTTCCATGATGAGCACTTTAAAGTTCTGCTATGTGGCGCGTATTATCCGTATTG
 ACGCCGGCAAGAGCAACTCGGTGCCCATACACTATTCTCAGAATGACTGGTGTAGACTCACCAGTCACAG
 AAAAGCATCTACGGATGGCATGACAGTAAGAGAATTATGCACTGCTGCCATAACCAGTGTGATAACACTCGGG
 CCAACTTACTCTGACAACGATCGGAGGACCGAAGGAGCTAACCGCTTTTGACAAACATGGGGATCATGTA
 CTCGCCCTGATCGTGGGAAACCGGAGCTGAATGAAGCATAACCAACGACGAGCGTACACCACCGATGCCGTAG
 CAATGGCAACAAACGTTGCCAAACTATTAACTGGCGAACTACTTACTCTAGCTTCCCGCAACAATTAGACT
 GGATGGAGGCGGATAAAAGTTGCGAGGACACTTCTGCCCTCGGCTGGTTATTGCTGATAAAAT
 CTGGAGGCGGTTGAGCGTGGGTCTCGGGTATCATTGCACTGGCCAGATGTAAGCCCTCCGTATCGTAG
 TTATCTACACGAGGGAGTCAGGCAACTATGGATGAAGAAATAGACAGATCGTGTGAGATAGGTGCCTCACTGA
 TTAAGCATTGGTAACTGTCAGACCAAGTTACTCATATATACTTAGATTGATTAAACTCATTAAATT
 AAAGGATCTAGGTGAAGATCCTTTGATAATCTCATGACCAAATCCCTAACGTGAGTTTGTGTTCCACTGAG
 CGTCAGACCCCGTAGAAAAGATCAAAGGATCTTCTTGAGATCCTTTCTGCCGTAATCTGCTGCTGCC
 CAAAAAAACCCACCGCTACCGCGGTTGTTGCCGATCAAGAGCTACCAACTCTTCCGAAGGTAACTG
 GCTTCAGCAGCGCAGATACCAAAACTGTTCTCTAGTGTAGCGTAGTTAGGCCACCACTCAAGAAACTCTG
 TAGCACGCCCTACATACCTCGCTGCTTAATCCGTGACCGTGTGCTGCCAGTGGCGATAAGCGTGTCTTA
 CCGGGTGGACTCAAGACGATAGTTACCGGATAAGGCCAGCGGTGGCTGAACGGGGGTTGTGACACAGC
 CCAGCTTGGAGCGAACGACCTACACCGAACCTGAGATAACCTACAGCGTGAGCTATGAGAAAGGCCACGCTCCCG
 AAGGGAGAAAGGCCGACAGGTATCCGTAAGCGGCAGGGCGGAACAGGAGAGCGCAGGAGGAGCTTCCAGGGG
 GAAACGCCCTGGTATCTTATAGTCCGTGCGGTTGCCACCTCTGACTTGAGCGTCGATTTTGATGCTCGT
 CAGGGGGGCGGAGCCTATGGAAAACGCCAGCAACGCCCTTTACGGTCTCTGCCCTTTGCTGCCCTTTG
 CTCACATGTTCTCTCGGTTATCCCTGATTCTGTGGATAACCGTATTACCGCCTTGAGTGAGCTGATACCG
 CTGCCGCCAGCGAACGACCGAGCGCAGCGAGCTAGTGTAGCGAGGAGCGGAAGAGGCCAAACGCC
 CTCTCCCGCGCTGGCGATTCAATGCACTGCCAGACAGGTTCCGACTGAAAGCGGGAGTGCAG
 GCAACGCAATTAAATGTGAGTTAGCTCACTCATTAGGCCACCCAGGCTTACACTTTATGCTTCCGGCTGTATGT
 TGTGTGGAATTGTGAGCGGATAACAAATTTCACACAGGAAACAGCTATGACCATGATTACGAATTGATCCAAGCTT
 ATCGATTTCGAACCCCTCGACCGCCGGAGTATAATAGAGGCGCTCGTACGGAGCGACAATTCAATTCAAACA
 AGCAAAGTGAACA

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